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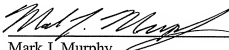
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in the following listed application(s) or patent(s) for which the issue fee has been paid.

| <b><u>Patent No.</u></b> | <b><u>Serial No.</u></b> | <b><u>Patent Date</u></b> | <b><u>US Filing Date</u></b> | <b><u>Confirmation No.</u></b> | <b><u>Attorney Docket No.</u></b> |
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| 7,348,953 B1             | 09/716,885               | 03/25/2008                | 11/20/2000                   | 1074                           | SEL 229                           |

Respectfully Submitted,



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**(12) United States Patent**  
**Satake****(10) Patent No.: US 7,348,953 B1**  
**(45) Date of Patent: Mar. 25, 2008****(54) METHOD OF DRIVING LIQUID CRYSTAL DISPLAY DEVICE****(75) Inventor: Rumo Satake, Kanagawa (JP)****(73) Assignee: Semiconductor Energy Laboratory Co., Ltd. (JP)****(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.**(21) Appl. No.: 09/716,885****(22) Filed: Nov. 20, 2000****(30) Foreign Application Priority Data**

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**(51) Int. Cl.**  
**G09G 3/36 (2006.01)****(52) U.S. Cl. .... 345/97; 345/89; 345/94; 345/95****(58) Field of Classification Search .... 345/55-100; 349/76, 133, 136, 171, 172, 173, 174, 184, 349/100**

See application file for complete search history.

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*Primary Examiner*—David L. Lewis*(74) Attorney, Agent, or Firm*—Cook, Alex, McFarron, Manzo, Cummings & Mehler, Ltd.**(57) ABSTRACT**

A method of driving a liquid crystal display device is provided which can decrease the hysteresis of thresholdless liquid crystal and which can, depending on the liquid crystal, improve the response time. By providing a "0 V" reset period before or after a gradation display period, the hysteresis of the thresholdless liquid crystal is prevented. With regard to a liquid crystal which has a small spontaneous polarization and with which switching between halftones takes a lot of time, there is an effect of improving the response time by switching via "0 V".

**41 Claims, 22 Drawing Sheets**